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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,400	06/30/2003	Mats Lidstrom	013628.00498 (02CXT0077D)	1900
77339 7590 05/21/2008 JACKSON WALKER (CONEXANT) 901 MAIN STREET, SUITE 6000 DALLAS, TX 75202				
EXAMINER				
VO, DON NGUYEN				
ART UNIT		PAPER NUMBER		
2611				
MAIL DATE		DELIVERY MODE		
05/21/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/611,400

**Applicant(s)**

LIDSTROM ET AL.

**Examiner**

Don N. Vo

**Art Unit**

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Acknowledgment***

1. This Office Action is responsive to the Amendment filed on 03/21/2008.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 10, 11, 20, 21 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Young (US 6,011,950; newly cited art).

Regarding claims 1, 10, 11, 20, 21 and 24, Young, as shown in figures 1-3, teaches a method and apparatus for transcoding (converting) a received first digital signal with the first modulation and encoding scheme (Fig. 1: 13; Fig. 2: 45; Fig 3: 61) to a second digital signal with a second modulation and encoding scheme comprising demodulator and decoder (Fig. 1: 15 & 17; Fig.2: 46 & 48; Fig.3: 62 & 64), modulator and encoder (Fig. 1: 19 & 21; Fig.2: 54 & 56; Fig.3: 77 & 79). See also column 2, line 50 to column 3, line 13 and column 6, line 31 to column 7, line 19. It is noted that Young does not explicitly teach the upconverter. However, it is inherently known that the QAM modulator includes an upconverter for upconverting and modulating the QAM signal. For example, see previously cited reference Myers (US 6,771,710).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 2-8, 12-18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young (US 6,011,950) in view of Myers (US 6,771,710; art of record).

Regarding claims 2-8, 12-18 and 22, Young teaches all subject matter claimed except for the further details of the upconverter comprising upsampler, mixers and combiner. However, Myers, from the same field of endeavor and as shown in figures 1 and 6, teaches an upconverter comprising upsampler (32), mixers (34, 36, 40, 42) and combiner (46) which can be implemented using gate array to improve the fidelity and high speed operation. See Myers: column 2, line

44 to column 4, line 11. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Young by implementing the upconverter (82) using the arrangement of upsampler, mixers and combiner as taught by Myers so that high fidelity and high speed operation can be achieved.

7. Claims 9, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young (US 6,011,950).

Regarding claims 9, 19 and 23, Young teaches all subject matter claimed except for specifying the first modulation and encoding scheme is 8-PSK Turbo Coding. Young discloses QPSK or QAM and Viterbi coding instead. See Young: column 2, lines 50-67. However, such 8-PSK modulation and Turbo coding is well known in the art of digital communications at the time of invention and therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Young by employing the 8-PSK modulation and Turbo coding since it is just an alternative way of modulating and coding the data.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reference Lou (US 7,002,898) is cited because they are pertinent to the method and apparatus for transcoding the digital signal.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Don N. Vo whose telephone number is (571) 272-3018. The examiner can normally be reached on Mon-Fri (9:00AM - 6:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MOHAMMAD GHAYOUR can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Don N. Vo/  
Primary Examiner, Art Unit 2611